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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WANG, ALBERT C	

ART UNIT	PAPER NUMBER
2115	3

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/746,200	NATU, MAHESH S.	
	Examiner	Art Unit	
	Albert Wang	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,2,5-9,12,13 and 16-18 is/are rejected.

7)☒ Claim(s) 3,4,10,11,14 and 15 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Original claims 1-18 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5-9, 12, 13 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleinsorge et al., U.S. Patent No. 6,247,109 ("Kleinsorge").

As per claim 1, Kleinsorge discloses a method for sharing a device in a computer system between operating system uses and non-operating system uses, comprising:

generating a false remove signal in regard to a device (Col. 29, lines 43-65, execute PAL MIGRATE);

placing said device in a sleep state (Fig. 9A, step 902, save current hardware state);

putting said device in an alternative mode (Col. 29, lines 43-65, CPU is migrated to another partition);

awakening said device from sleep and returning it to the operating system (Fig. 9B, step 918, restore previous HW state; Col. 29, lines 43-65, CPU is migrated back to original partition; Fig. 2, original partition has its own operating system instance; Col. 20, line 51 – Col. 21, line 5).

As per claim 2, Kleinsorge discloses the false remove signal is generated in response to a request to divert the device (Col. 29, lines 43-65, to migrate is to divert).

As per claim 5, Kleinsorge discloses data present in the device is stored in memory when the device is put in a sleep state and returned to the device when it is awakened (Figs. 9A&B, steps 902 and 918).

As per claim 6, Kleinsorge discloses said awakening is in response to a second false signal (Col. 23, lines 43-65, migrating back to original partition would be initiated by PAL MIGRATE).

As per claim 7, Kleinsorge discloses said device is a processor (Col. 29, lines 43-65, said device is a CPU).

As per claim 8, Kleinsorge discloses an apparatus for sharing a device between operating system uses and non-operating system uses, comprising:

a plurality of devices (Fig. 1, CPUs 108-114);

a controller connected to said devices through a bus (Col. 8, lines 47-55, primary CPU);

a memory connected to said controller (Fig.1, memory 120);

means to request access to a device for non-operating system uses;

said controller generating a false remove event in response to a request to divert the device (Col. 5, lines 16-27, primary processor provides migration request), putting the device to sleep and granting control of the device to non-operating system uses for a limited time and awakening the device after the non-operating system use is completed (Col. 20, lines 51 – Col. 21, line 5, temporarily loan a CPU from operating system instance; Fig. 9A, step 902, save current hardware state; Col. 29, lines 43-65, CPU is migrated to another partition and then back; Fig. 9B, step 918, restore previous HW state).

As per claim 9, Kleinsorge discloses a peripheral component interface bus connected to said controller, to which other peripheral components can be connected (Col. 4, lines 6-21, for PCI slots; Fig. 1, I/O processor 118).

As per claim 12, Kleinsorge discloses said device is a processor (Col. 29, lines 43-65, said device is a CPU).

As per claim 13, Kleinsorge discloses a method of operating a server, comprising:

providing a plurality of devices (Fig. 1, CPUs 108-114), a controller connected to said devices (Col. 8, lines 47-55, primary CPU) and a memory connected to said controller (Fig.1, memory 120);

using said devices to perform operating system tasks (Col. 7, lines 33-39);

generating a false remove signal concerning at least one of said plurality of devices (Col. 29, lines 43-65, execute PAL MIGRATE);

placing said device in a sleep state (Fig. 9A, step 902, save current hardware state);

using said device for a non-operating system use for a limited time(Col. 20, lines 51 – Col. 21, line 5, temporarily loan a CPU from operating system instance);

awakening said device after said non-operating system use ends (Col. 29, lines 43-65, CPU is migrated to another partition and then back; Fig. 9B, step 918, restore previous HW state).

As per claim 16-18, since Kleinsorge discloses the method of claims 2, 6 and 7, Kleinsorge discloses the claimed method.

Allowable Subject Matter

3. Claims 3, 4, 10, 11, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 703-305-5385. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

aw
July 23, 2004

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100